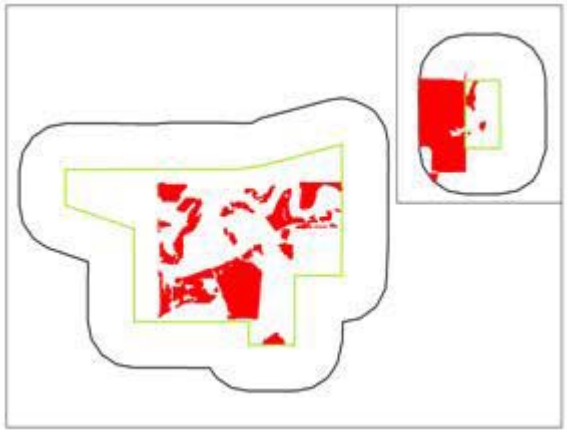
H-REPR *Andropogon gerardii - (Sorghastrum nutans)* Herbaceous Alliance
Planted Semi - Natural Restored Grassland Prairie

Associations and Alliances
Andropogon gerardii - (Sorghastrum nutans)
Herbaceous Alliance

Common Species
Panicum virgatum
Sorghastrum nutans
Bouteloua curtipendula
Andropogon gerardii
Bromus inermis

Range and Distribution



Description
This type represents the active restoration of native tall grass prairie at FOLS, where the managers are attempting to restore non-native and introduced vegetation. This is being accomplished through a regime of herbicide, planting and periodic burning in the formerly plowed fields. The dominant vegetation of this type will likely change with time depending on the extent of the control measures and the expression of the original seed mix. While the long-term goal is a fine mosaic of mixed native grass species, most fields are currently dominated by a small number of grass species. Depending on the species composition three subtypes were identified at FOLS. These included: the *Panicum virgatum*, the *Sorghastrum nutans- Bouteloua curtipendula-Andropogon gerardii*, and the *Leptochloa dubia* subtypes. Old stands of *Panicum virgatum* were common on mesic sites that now contain near monotypic stands of switchgrass. The *Sorghastrum nutans-Bouteloua curtipendula-Andropogon gerardii* subtype is prevalent on upland sites and some stands still have high concentrations of smooth brome or can have mixtures of native tall grasses. In 2005, one restored field was inadvertently seeded with green sprangletop (*Leptochloa dubia*), which was the dominant grass at the time of the field survey. On the color infrared imagery this type appeared as a mottled light pink with a fair amount of blue-green undertones. Some of the fields still showed signs of past plowing.

Photo Signature Examples

Representative Ground Photo

Planted Semi - Natural Restored Grassland Prairie

PHYSIOGNOMIC CLASS	V	Herbaceous vegetation
PHYSIOGNOMIC SUBCLASS	V.A	Perennial graminoid vegetation
PHYSIOGNOMIC GROUP	V.A.5	Temperate or subpolar grassland
PHYSIOGNOMIC SUBGROUP	V.A.5.N	Natural/semi-natural temperate or subpolar grassland
FORMATION	V.A.5.N.a	Tall sod temperate grassland
ALLIANCE	A*ndropogon gerardii (Sorghastrum nutans*) Herbaceous Alliance	

Alliance Identifier: A.1192

RANGE

Globally

This community has been defined for Fort Larned National Historic Site. At Fort Larned National Historic Site, managers are attempting to restore vegetation to the Big Bluestem (Yellow Indiangrass) Alliance through planting native grasses and forbs in formerly plowed fields. Natural vegetation of this alliance is most common in tallgrass prairies of the Great Plains. Stands of Big Bluestem (Yellow Indiangrass) Herbaceous Alliance occur from Texas and Arkansas north into Montana, and east into Michigan, Ohio, Virginia, and Tennessee. In Canada it is found in southern Saskatchewan, southern Manitoba, and southern and northwestern Ontario.

Fort Larned National Historic Site

Planted Semi-Natural Grasslands are found in the main Fort Unit both north and south of the Pawnee River.

ENVIRONMENTAL DESCRIPTION

Fort Larned National Historic Site

The fields that have been re-planted with native grasses were once plowed and leveled for agriculture, so they are flat with loamy soils.

MOST ABUNDANT SPECIES

Fort Larned National Historic Site

Panicum virgatum Subtype

Strata	Species
Herbaceous	*Panicum virgatum*

Sorghastrum nutans, Bouteloua curtipendula, Andropogon gerardii Subtype

Strata	Species
Herbaceous	*Bromus inermis, Sorghastrum nutans, Bouteloua curtipendula, Andropogon gerardii*

Leptochloa dubia Subtype

Strata	Species
Herbaceous	*Leptochloa dubia, Seteria viridis, Gaillardia pulchella, Bouteloua curtipendula, Chloris virgata*

CHARACTERISTIC SPECIES

Fort Larned National Historic Site

Panicum virgatum Subtype

Strata	Species
Herbaceous	*Panicum virgatum*

Sorghastrum nutans, Bouteloua curtipendula, Andropogon gerardii Subtype

Strata	Species
Herbaceous	*Sorghastrum nutans, Bouteloua curtipendula, Andropogon gerardii*

Leptochloa dubia Subtype

Strata	Species
Herbaceous	*Leptochloa dubia*

VEGETATION DESCRIPTION

Fort Larned National Historic Site

The dominant vegetation of the re-planted grasslands changes with time since planting, extent of measures to control smooth brome, and expression of the original seed mix. While the long-term goal of restoration is a fine mosaic of mixed native grass species, most fields are currently dominated by a small number of grass species.

Old stands of *Panicum virgatum* have grown into near monotypic stands of switch grass to 1.5 m tall. The *Sorghastrum nutans, Bouteloua curtipendula, Andropogon gerardii* Subtype can be predominately smooth brome (0.5 m tall), or can have mixtures of native tall grasses to 2 m in height. In 2005, one restored field was inadvertently seeded with green sprangletop (*Leptochloa dubia*) which was the dominant grass at the time of the field survey. Fort Larned administrators hope that the winters, which are longer and colder in Kansas than in the grass's native Texas, will check the growth of this grass, and that the co-planted bluestem grasses will begin to dominate. However, at the time of writing, the prevalence of *Leptochloa* made this subtype distinct from the other re-planted grasslands.

Many of the restored grassland fields contain wildflower species native to the Great Plains but not otherwise found at Fort Larned National Historic Site including *Salvia azurea*, *Gaillardia pulchella*, *Ratibida columnifera* and *Helianthus maximiliani*.

MAP CODE: PG1

MAP UNITS
PG1.L = *Leptochloa dubia* Subtype
PG1.M = *Sorghastrum, Bouteloua, Andropogon* Subtype
PG1.P = *Panicum virgatum* Subtype

PLOTS:
PG1.L = DO, DP, DQ
PG1.M = AC, AD, AE, AF, BN, BO, BP, DH, DJ, DK
PG1.P = BW, DF